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METHOD AND STRUCTURE FOR CONTROLLING STRESS IN A TRANSISTOR CHANNEL

Abstract

A method for manufacturing a device including an n-type device and a p-type device. In an aspect of the invention, the method involves forming a shallow-trench-isolation oxide (STI) isolating the n-type device from the p-type device. The method further involves adjusting the shallow-trench-isolation oxide corresponding to at least one of the n-type device and the p-type device such that a thickness of the shallow-trench-isolation oxide adjacent to the n-type device is different from a thickness of the shallow-trench-isolation oxide adjacent to the p-type device, and forming a strain layer over the semiconductor substrate.